PATENT ATTORNEY DOCKET NO.: 049128-5033

## What Is Claimed Is:

 A color-correction method for a liquid crystal display, comprising:

increasing a data voltage of a current frame if the data voltage of the current frame is greater than that of a previous frame, and decreasing the data voltage of the current frame if the data voltage of the current frame is not greater than that of the previous frame.

- 2. The method according to claim 1, wherein the increased data voltage of the current frame is proportionally increased with respect to a difference between the current data voltage and the previous data voltage.
- 3. The color-correction method according to claim 1, wherein the data voltage includes most significant bit data.

- 4. The method according to claim 1, wherein the data voltage includes both most significant bit data and least significant bit data.
- 5. A color-correction method for a liquid crystal display, comprising:

decreasing a data voltage of a current frame if the data voltage of the current frame is the same as that of a previous frame; and

increasing the decreased data voltage of the current frame if the decreased data voltage of the current frame is greater than that of the previous frame, and decreasing the decreased data voltage of the current frame if the decreased data voltage of the current frame is smaller than that of the previous frame.

6. The method according to claim 5, wherein the data voltage includes most significant bit data.

7.

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  The method according to claim 5, wherein the data
- voltage includes both most significant bit data and least significant bit data.
- 8. A color-correction apparatus for a liquid crystal display, comprising:
  - a frame memory delaying data for one frame interval; and
- a data modulator modulating the data from the frame memory using a look-up table having modulation information for increasing a data voltage of a current frame if the data voltage of the current frame is greater than that of a previous frame, and decreasing the data voltage of the current frame if the data voltage of the current frame is not greater than that of the previous frame.
- The color-correction apparatus according to claim 8, further comprising,
- a liquid crystal display panel displaying modulated data by the data modulator;
  - a timing controller outputting input data to the frame

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memory and the data modulator;

a data driver applying the modulated data to the liquid crystal display panel under control of the timing controller; and

a gate driver selecting a scanning line of the liquid crystal display panel to be supplied with the modulated data.

10. A color-correction apparatus for a liquid crystal display, comprising:

a data comparator determining whether input data are changed between a previous frame and a current frame;

a first data modulator increasing a voltage level of the input data when the voltage is more increased at the current frame than at the previous frame and more decreasing the voltage level when the voltage level is more reduced at the current frame than at the previous frame; and

a second data modulator decreasing the voltage when the voltage of the current frame is equal to that of the previous frame in accordance with a compared result from the data comparator.

- 11. The color-correction apparatus according to claim 10, further comprising,
- a liquid crystal display panel displaying modulated data by the first and second data modulators;
- a timing controller outputting input data to the data comparator and the first and second data modulators;
- a data driver applying the modulated data to a data line of the liquid crystal display panel under control of the timing controller; and
- a gate driver selecting a scanning line of the liquid crystal display panel supplied with the modulated data under control of the timing controller.
- 12. The color-correction apparatus according to claim 10, wherein the data comparator includes an exclusive logical sum operator executing an exclusive logical sum operation of delayed data and current input data.
- 13. The color-correction apparatus according to claim 10, wherein the first modulator includes:
  - a frame memory delaying the input data for one frame 32

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interval; and

a look-up table registered with modulation information for increasing a voltage level of the input data when the voltage level is more increased at the current frame than at the previous frame and decreasing the voltage of the input data when the voltage level is more reduced at the current frame than at the previous frame.

14. The color-correction apparatus according to claim 10, wherein the second modulator includes a look-up table registered with modulation information for reducing the voltage level when the voltage level of the current frame is equal to that of the previous frame based on information from the data comparator.